

Attorney's Docket No.: 09712-331001 / Z-49

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Henry A. Hill

Art Unit : 2877

Serial No.: 10/630,361

Examiner: Unknown

Filed

: July 29, 2003

Title

: COMPENSATION FOR ERRORS IN OFF-AXIS INTERFEROMETRIC

**MEASUREMENTS** 

## MAIL STOP AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## INFORMATION DISCLOSURE STATEMENT

Applicants request consideration of the references listed on the attached PTO-1449 form. Under 37 C.F.R. § 1.98 (a)(2)(ii), only copies of foreign patent documents and/or non-patent literature are enclosed. Copies of any listed U.S. patents or U.S. patent application publications can be provided upon request.

This statement is being filed before the receipt of a first Office Action on the merits. Please apply any charges or credits to Deposit Account No. 06-1050.

Date: 7/25/2005

Fish & Richardson P.C. 225 Franklin Street Boston, MA 02110

Telephone: (617) 542-5070 Facsimile: (617) 542-8906

21131017.doc

Respectfully submitted,

Chris C. Bowley Reg/No. 55,016

## CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date of Deposit

Signature

Typed or Printed Name of Person Signing Certificate

Substitute Form PTO-1449 (Modified)

next communication to applicant.

U.S. Department of Commerce Patent and Trademark Office Attorney's Docket No. 09712-331001

Application No. 10/630,361

Information Disclosure Statement by Applicant (Use several sheets if necessary)

Henry A. Hill

Applicant

(37 CFR §1.98(b))

Filing Date Group Art Unit July 29, 2003 2877

U.S. Patent Documents							
Examiner	Desig.	Document	Publication				Filing Date
Initial	ID	Number	Date	Patentee	Class	Subclass	If Appropriate
	AA	20050151951	7/14/2005	Hill			
	AB	20050134862	6/23/2005	Hill			
	AC	20050030549	2/10/2005	Hill			
	AD	20040189998	9/30/2004	Hill			
	AE	20040046965	3/11/2004	Hill			
	AF	20030090675	5/15/2003	Fujiwara			
	AG	20020089671	7/11/2002	Hill			
	AH	20020048026	4/25/2002	Isshiki et al.			
	AI	20010035959	11/1/2001	Hill	,		
	AJ	6,912,054	6/28/2005	Hill			
	AK	6,906,784	6/14/2005	Hill			
	AL	6,891,624	5/10/2005	Hill			
	AM	6,882,430	4/19/2005	Hill			
	AN	6,867,867	3/15/2005	Hill			
	AO	6,839,141	1/4/2005	Hill			
	AP	6,836,335	12/28/2004	Hill			
	AQ	6,819,434	11/16/2004	Hill			
	AR	6,806,962	10/19/2004	Hill			
	AS	6,806,961	10/19/2004	Hill			
	AT	6,795,197	9/21/2004	Hill			
	AU	6,791,693	9/14/2004	Hill			
	AV	6,762,845	7/13/2004	Hill			
	AW	6,757,066	6/29/2004	Hill			
	AX	6,747,744	6/8/2004	Hill			
	AY	6,738,143	5/18/2004	Chu			
	AZ	6,727,992	4/27/2004	Hill			
	AAA	6,710,884	3/23/2004	Hill			

Examiner Signature	Date Considered
EXAMINER: Initials citation considered Draw line through citation if no	t in conformance and not considered. Include conv of this form with

Substitute Form PTO-1449  (Modified)  U.S. Department of Commerce Patent and Trademark Office		Attorney's Docket No. 09712-331001	Application No. 10/630,361	
	closure Statement	Applicant Henry A. Hill		
(Use several sheets if necessary) (37 CFR §1.98(b))		Filing Date July 29, 2003	Group Art Unit 2877	

U.S. Patent Documents							
Examiner	Desig.	Document	Publication	5		0 1 1	Filing Date
Initial	ID	Number 6,700,665	Date 3/2/2004	Patentee	Class	Subclass	If Appropriate
	ABB			Hill			
	ACC	6,650,419	11/18/2003	Hill			
	ADD	6,384,899	5/7/2002	den Boef			
	AEE	6,330,105	12/11/2001	Rozelle et al.			
	AFF	6,304,318	10/16/2001	Matsumoto			
	AGG	6,285,457	9/4/2001	Ukaji			
	АНН	6,252,668	6/26/2001	Hill			
	AII	6,246,481	6/12/2001	Hill			
	AJJ	6,159,644	12/12/2000	Hidetoshi			
	AKK	6,134,007	10/17/2000	Naraki et al.			
	ALL	6,046,792	4/4/2000	Van Der Werf et al.		<del>,</del>	
	AMM	6,040,096	3/21/2000	Kakizaki			
	ANN	6,020,964	2/1/2000	Loopstra et al.			
	AOO	6,008,902	12/28/1999	Rinn			
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	APP	5,801,832	9/1/1998	Van Der Brink			
	AQQ	5,781,277	7/14/1998	Iwamoto			
	ARR	5,764,361	6/9/1998	Kato et al.			
	ASS	5,757,160	5/26/1998	Kreuzer			
	ATT	5,724,136	3/3/1998	Zanoni			
····	AUU	5,663,893	9/2/1997	Wampler et al.			
	AVV	5,663,793	9/2/1997	de Groot			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	AWW	5,408,318	4/18/1995	Slater			
	AXX	5,363,196	11/8/1994	Cameron			<u>-</u>
	AYY	5,331,400	7/19/1994	Wilkening et al.			
-	AZZ	5,187,543	2/16/1993	Ebert			
,	AAAA	5,114,234	5/19/1992	Otsuka et al.			
	ABBB	5,064,289	11/12/1991	Bockman			

Examiner Signature	Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 09712-331001	Application No. 10/630,361	
Information Disclo by Appl		Applicant Henry A. Hill		
(Use several sheets if necessary) (37 CFR §1.98(b))		Filing Date July 29, 2003	Group Art Unit 2877	

	U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate	
	ACCC	4,881,816	11/21/1989	Zanoni				
	ADDD	4,859,066	8/22/1989	Sommargren				
	AEEE	4,802,765	2/7/1989	Young et al.				
	AFFF	4,790,651	12/13/1988	Brown et al.				
	AGGG	4,714,339	12/22/1987	Lau et al.				
	АННН	4,711,573	12/8/1987	Wijntjes et al.				
	AIII	4,606,638	8/19/1986	Sommargren				

	Foreign Patent Documents or Published Foreign Patent Applications							
Examiner	Desig.	Document	Publication	Country or			Trans	lation
Initial	ID	Number	Date	Patent Office	Class	Subclass	Yes	No
	AJJJ	WO 01/90686	11/29/2001	WIPO	,			
		JP 10-260009						
	AKKK	Translation of						
		abstract only	9/29/1998	Japan				
	ALLL	JP 7-351078						
	ALLL	Abstract only	12/25/1995	Japan				
	AMMM	JP 8-117083				· ·		
		Abstract only	4/15/1996	Japan				

	Other D	ocuments (include Author, Title, Date, and Place of Publication)						
Examiner	Desig.							
Initial	ID	Document						
	ANNN	Bennett, S.J "A Double-Passed Michelson Interferometer." Optics Communications, 4:6, pp.						
	AINININ	428-430, 1972.						
	A000	Wu et al. "Analytical modeling of the periodic nonlinearity in heterodyne interferometry." Applied						
	AUUU	Optics, 37:28, pp. 6696-6700, 1998.						
	APPP	Hines et al. "Sub-Nonometer Laser Metrology – Some Techniques and Models. ESO Conference						
	AFFF	on High-Resolution Imaging by Interferometry II, pp.1195-1204, 1991						
	AQQQ	Bobroff, Norman. "Recent advances in displacement measuring interferometry." Meas. Sci.						
	AQQQ	Technol. 4, pp. 907-926, 1993.						
	ARRR	Oka et al. "Polarization heterodyne interferometry using another local oscillator beam." Optics						
	AKKK	Communications, 92, pp. 1-5, 1992.						
	ASSS	Badami et al. "Investigation of NonLinearity in High Accuracy Heterodyne Laser Interferometry."						
	ASSS	American Society for Precision Engineering, 1997 Proceedings, 16, pp. 153-156, 1997.						
	ATTT	Bobroff, Norman. "Residual errors in laser interferometry from air turbulence and nonlinearity."						
	AIII	Applied Optics, 26:13, pp. 2676-2686, 1987.						

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if no	t in conformance and not considered. Include copy of this form with
next communication to applicant	thir combination and not considered. Molade copy of this form with